

Notice of Allowability

Application No.

10/757,919

Examiner

Katherine W. Mitchell

Applicant(s)

TOTH ET AL.

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/21/2006.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input checked="" type="checkbox"/> Other <u>See Continuation Sheet.</u> |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

IN THE CLAIMS

3. Previously Withdrawn **claims 6 and 7** have been rejoined as allowable claims now that the independent claim is allowable. The status identifier of claims 6 and 7 has been changed to --(Original)--.

4. The following is an examiner's statement of reasons for allowance: The closest prior art of record, Guth USP 6336636, has the first and second sealing surfaces bent with respect to each other such that only first sealing surface is in direct engagement with the rotating surface to establish a dynamic seal. Further, Guth cannot work if both portions were in direct contact with the rotating surface, as the first sealing portion/collar is also directly connected to the flexible annular support surface and the 2nd collar/sealing portion is at right angles.

5. The 112 rejection is overcome by applicant's definition from an accepted scientific source that rubber is a polymer.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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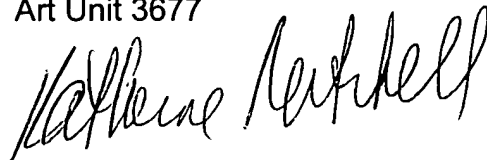
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell
Primary Examiner
Art Unit 3677

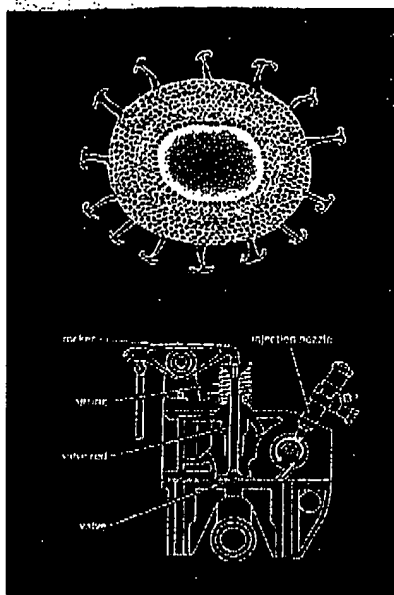


Kwm
5/8/2006

Continuation of Attachment(s) 9. Other: dictionary definition of "RUBBER"- 3 pages. *-attachment to Exam. Amend.*

McGraw-Hill

Dictionary of Scientific and Technical Terms

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In addition, material has been drawn from the following references: R. E. Huschke, *Glossary of Meteorology*, American Meteorological Society, 1959; *U.S. Air Force Glossary of Standardized Terms*, AF Manual 11-1, vol. 1, 1972; *Communications-Electronics Terminology*, AF Manual 11-1, vol. 3, 1970; W. H. Allen, ed., *Dictionary of Technical Terms for Aerospace Use*, 1st ed., National Aeronautics and Space Administration, 1965; J. M. Gilliland, *Solar-Terrestrial Physics: A Glossary of Terms and Abbreviations*, Royal Aircraft Establishment Technical Report 67158, 1967; *Glossary of Air Traffic Control Terms*, Federal Aviation Agency; *A Glossary of Range Terminology, White Sands Missile Range, New Mexico*, National Bureau of Standards, AD 467-424; *A DOD Glossary of Mapping, Charting and Geodetic Terms*, 1st ed., Department of Defense, 1967; P. W. Thrush, comp. and ed., *A Dictionary of Mining, Mineral, and Related Terms*, Bureau of Mines, 1968; *Nuclear Terms: A Glossary*, 2d ed., Atomic Energy Commission; F. Casey, ed., *Compilation of Terms in Information Sciences Technology*, Federal Council for Science and Technology, 1970; *Glossary of Stinfo Terminology*, Office of Aerospace Research, U.S. Air Force, 1963; *Naval Dictionary of Electronic, Technical, and Imperative Terms*, Bureau of Naval Personnel, 1962; *ADP Glossary*, Department of the Navy, NAVSO P-3097.

McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS

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1283

RPE
rudaceous

RUBBER TREE



Branch of the rubber tree.

RUBIDIUM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Periodic table of the chemical elements showing the position of rubidium.

secreted by bees to nourish the egg of the queen bee; used in face creams.

RPE See rotating platinum electrode.

rpm See revolution per minute.

rps See revolution per second.

RQ See respiratory quotient.

RR Lyrae stars [ASTRON] Pulsating variable stars with a period of 0.05-1.2 days in the halo population of the Milky Way Galaxy; color is white, and they are mostly stars of spectral class A and have been called cluster-type cepheids.

rRNA See ribosomal ribonucleic acid.

R scan See R scope.

R scope [ELECTR] An A scope presentation with a segment of the horizontal trace expanded near the target spot (pip) for greater accuracy in range measurement. Also known as R indicator; R scan.

R tectonite [PETR] A tectonite in which the fabric is believed to have resulted from rotation.

RTF See resistance transfer factor.

RTG See radioisotope thermoelectric generator.

r-theta navigation See omnibearing-distance navigation.

RTL See resistor-transistor logic.

RTTY See radioteletype.

Ru See ruthenium.

rubber [ORG CHEM] A natural, synthetic, or modified high polymer with elastic properties and, after vulcanization, elastic recovery; the generic term is elastomer.

rubber accelerator [ORG CHEM] A substance that increases the speed of curing of rubber, such as thiocarbonyl.

rubber adhesive [MATER] An adhesive made with a rubber base by using natural or synthetic rubber in an evaporative solvent; a tacky mixture of rubber and filler material, as used on pressure-sensitive tapes; or rubber-solvent-catalyst mixtures (usually two-part) that cure in place.

rubber-base paint [MATER] A paint in which chlorinated rubber or synthetic latex is the nonvolatile vehicle.

rubber belt [DES ENG] A conveyor belt that consists essentially of a rubber-covered fabric; fabric is cotton, or nylon or other synthetic fiber, with steel-wire reinforcement.

rubber blanket [ENG] A rubber sheet used as a functional die in rubber forming.

rubber cement [MATER] An adhesive composed of unvulcanized rubber in an organic solvent.

rubber-covered steel conveyor [DES ENG] A steel conveyor band with a cover of rubber bonded to the steel.

rubber fiber [MATER] A fiber composed of natural or synthetic rubber; used to make elastic yarn for clothing.

rubber foam See rubber sponge.

rubber hydrochloride [ORG CHEM] White, thermoplastic hydrochloric acid derivative of rubber; water-insoluble powder or clear film, soluble in aromatic hydrocarbons; softens at 110-120°C; used for protective coverings, food packaging, shower curtains, and rainwear.

rubber ice [OCEANOGR] Newly formed sea ice which is weak and elastic.

rubber plating [ENG] The laying down of a rubber coating onto metals by electrodeposition or by ionic coagulation.

rubber solvent [MATER] Fast-evaporating petroleum distillate used as a solvent for tackifying rubber during plying (laminating) operations, and in compounding rubber compounds.

rubber sponge [MATER] Foamed, flexible rubber; produced by beating air into unvulcanized latex, or by incorporating a gas-producing ingredient (such as sodium bicarbonate) into a strongly masticated rubber stock; used for comfort cushioning, packaging, and shock insulation. Also known as cellular rubber; foam rubber; rubber foam; sponge rubber.

rubber tree [BOT] *Hevea brasiliensis*. A tall tree of the spurge family (Euphorbiaceae) from which latex is collected and coagulated to produce rubber.

rubber wheel [DES ENG] A grinding wheel made with rubber as the bonding agent.

rubbing [GRAPHICS] An impression made by moistening a thin, tough paper and patting it into the incised parts of a carved or modeled surface, then rubbing it with pencil, chalk, inked pad, or watercolor; an actual-size image of the original is produced on the paper.

rubbing oil [MATER] 1. A low-viscosity petroleum oil used either with or without an abrasive to polish dried surfaces, such as paint. 2. A nonviscous oil used for polishing wood furniture.

rubble [CIV ENG] 1. Rough, broken stones and other debris resulting from the deterioration and destruction of a building. 2. Rough stone or brick used in coarse masonry or to fill the space in a wall between the facing courses. (GEOL) 1. A loose mass of rough, angular rock fragments, coarser than sand. 2. See talus.

rubella [MED] A benign, infectious virus disease of humans characterized by coldlike symptoms, fever, and transient, generalized pale-pink rash. Also known as epidemic roseola; French measles; German measles; röteln.

rubellite [MINERAL] The red to red-violet variety of the gem mineral tourmaline; hardness is 7-7.5 on Mohs scale, and specific gravity is near 3.04.

rubecula See measles.

Rubiaceae [BOT] The single family of the plant order Rubiales.

Rubiales [BOT] An order of dicotyledonous plants marked by their inferior ovary, regular or nearly regular corolla, and opposite leaves with interpetiolar stipules or whorled leaves without stipules.

rubidium [CHEM] A chemical element, symbol Rb, atomic number 37, atomic weight 85.47; a reactive alkali metal; salts of the metal may be used in glass and ceramic manufacture. rubidium bromide [INORG CHEM] RbBr. Colorless, regular crystals, melting at 683°C; soluble in water; used as a nerve sedative.

rubidium chloride [INORG CHEM] RbCl. A water-soluble, white, lustrous powder melting at 715°C; used as a source for rubidium metal, and as a laboratory reagent.

rubidium halide [INORG CHEM] Any of the halogen compounds of rubidium; examples are RbBr, RbCl, RbF, RbIBrCl, RbBr₂Cl, and RbIBr₂.

rubidium halometallate [INORG CHEM] Halogen-metal-containing compounds of rubidium; examples are Rb₂GeF₆ (rubidium hexafluorogermanate), Rb₂PtCl₆ (rubidium chloroplatinate), and Rb₂PdCl₆ (rubidium palladium chloride).

rubidium magnetometer See rubidium-vapor magnetometer. rubidium-strontium dating [GEOL] A method for determining the age of a mineral or rock based on the decay rate of rubidium-87 to strontium-87.

rubidium sulfate [INORG CHEM] Rb₂SO₄. Colorless, water-soluble rhomboid crystals, melting at 1060°C; used as a cathartic.

rubidium-vapor frequency standard [PHYS] An atomic frequency standard in which the frequency is established by a gas cell containing rubidium vapor and a neutral buffer gas.

rubidium-vapor magnetometer [ENG] A highly sensitive magnetometer in which the spin precession principle is combined with optical pumping and monitoring for detecting and recording variations as small as 0.01 gamma (0.1 micro-oersted) in the total magnetic field intensity of the earth. Also known as rubidium magnetometer.

rubriblast See pronormoblast.

rubricyte See pronormoblast.

ruby [MINERAL] The red variety of the mineral corundum; in its finest quality, the most valuable of gemstones.

ruby glass [MATER] Glass of a rich red color produced by adding selenium or cadmium sulfide, or copper oxide to the glass.

ruby laser [OPTICS] An optically pumped solid-state laser that uses a ruby crystal to produce an intense and extremely narrow beam of coherent red light.

ruby maser [PHYS] A maser that uses a ruby crystal in the cavity resonator.

ruby mica [MINERAL] The finest grade of Indian mica; used for electrical capacitors.

ruby silver [MINERAL] Either of two red silver sulfide minerals: pyrogyrite (dark-ruby silver) and proustite (light-ruby silver).

ruby zinc See zincite.

rudaceous [PETR] Of or pertaining to a sedimentary rock